

Maricopa County Department of Public Health WEEKLY INFLUENZA UPDATE 2017-2018 Season (10/01/2017-09/30/2018)

February 15, 2018

2017-2018 Week 6(02/04/2018 - 02/10/2018)

The Influenza Season is defined by MMWR surveillance weeks, beginning week 40 (October) and continues through week 39 (the following September).

Influenza Surveillance Indicators

[Lab Confirmed Cases](#)
[Hospital Emergency Visits](#)
[Outpatient Clinics](#)
[School Absenteeism](#)
[Flu Near You](#)

One previously reported pediatric death has been retracted due to a laboratory result that was later determined to be a false positive from an out of state clinical laboratory

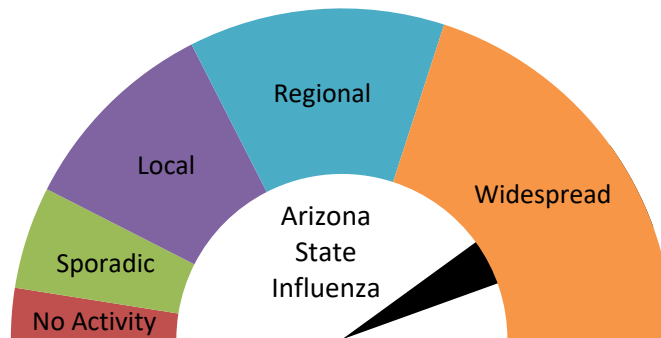


www.FluNearYou.org

The first official day of the 2017-2018 Influenza Season was October 1, 2017 and the surveillance season will continue through September 30, 2018. Maricopa County identified its first locally-acquired influenza case of the 2017-2018 season in week 41.

(These numbers are provisional due to a back-log in data-entry.)

- Since October 1, 2017 **11,334** cases have been laboratory-confirmed
- Some ILI (Influenza like Illness) indicators showed a slight decline this week.
- Maricopa County reported **2 Pediatric Influenza Death this season, PCR positive for A/H3 & B/Victoria**

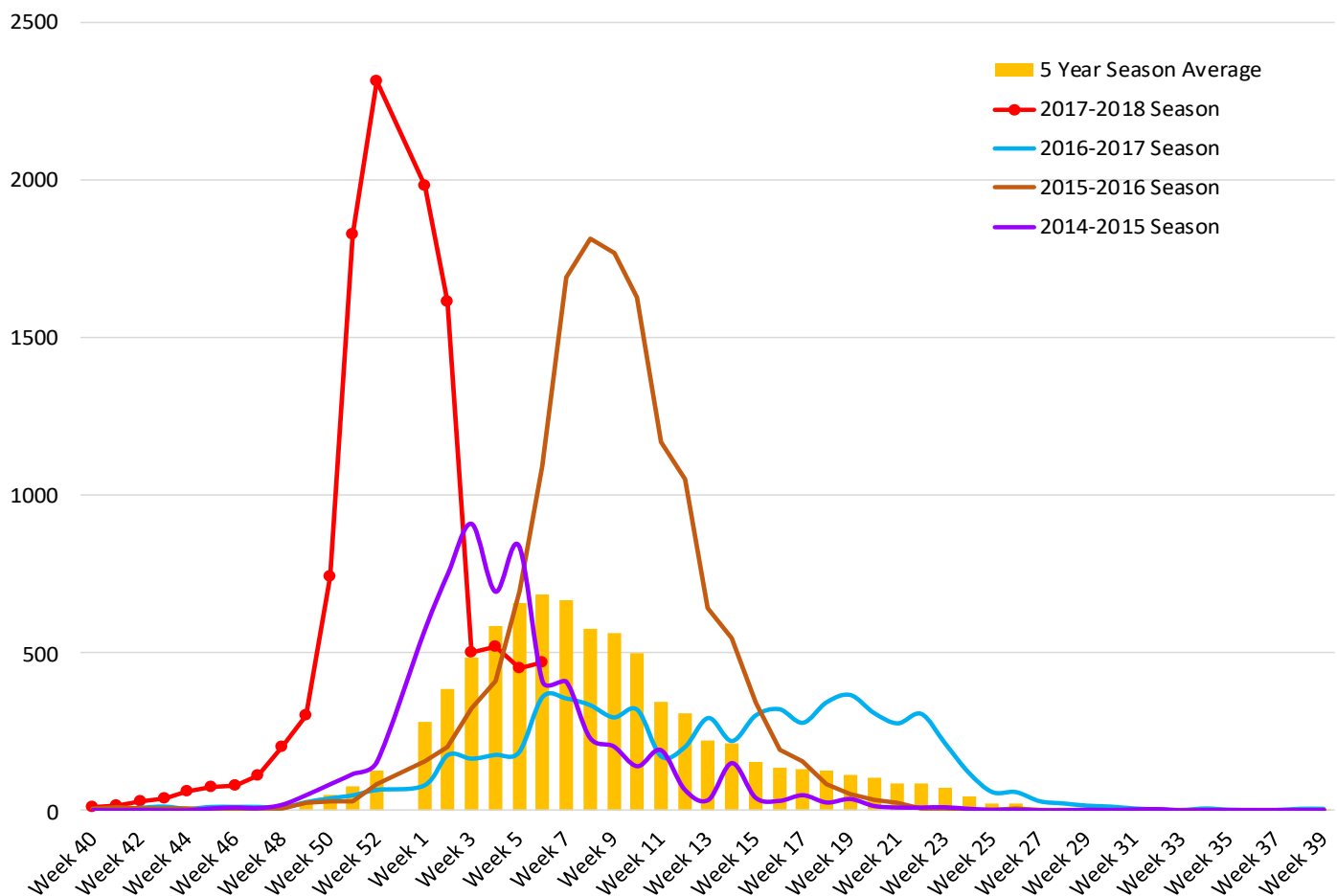


Influenza Activity	2017-2018	2016-2017	2015-2016	2014-2015
First Confirmed Case (no travel)	10/16/2017	10/3/2016	10/4/2015	10/3/2014
Weeks w/Widespread Activity (AZ)	Week 50-52 & 1-6	Week 6 - 9	Week 5 - 14	Week 1 - 6
Weeks w/ILI above Regional Threshold	Week 41, 43, 45-52 & 1-6	Week 49, 52 & 1-23	Week 51 - 16	Week 50 - 11
Weeks w/Outpatient visits above Threshold	Week 47 - 52 & 1 - 6	Weeks 47, 48, 50-52, 1-3, 5-10, 14 & 17-21	Weeks 45-52, 1-21, 23, 35 & 36	Weeks 48, 50-52, 1-10 & 12-14
Peak Week	Week 52 (12/24-12/30/2017) Unofficially	Week 6 (2/5-2-11/2016)	Week 8 (2/21-2/27/2016)	Week 3 (1/18-1/24/2015)
Pediatric Deaths	2	1	3	1
Total Cases	11,334	6,633	14,353	6,601

Individuals with Laboratory Confirmed Influenza

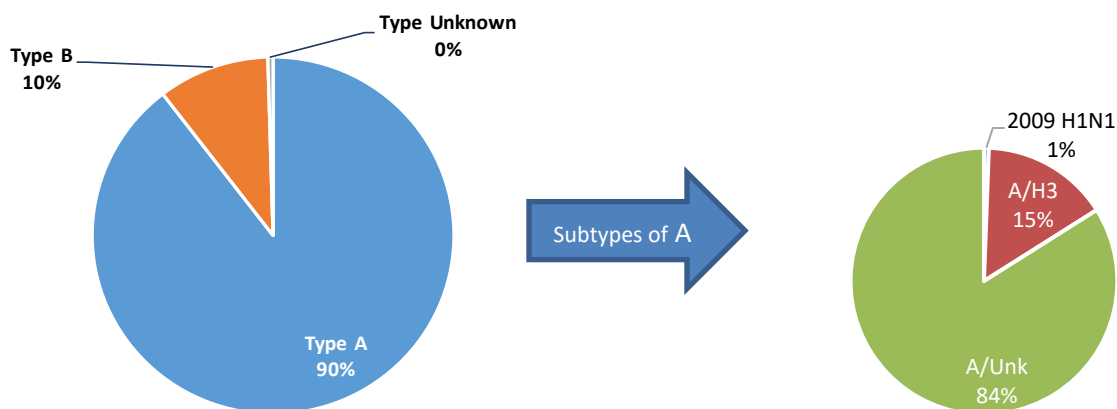
Trends of influenza laboratory test results compared to the previous 3 seasons. The current season is in **red**.

Table 1. Laboratory-Confirmed Influenza Cases Compared to Last Week and Last Season, Maricopa County	Cumulative Season Total	Current Week Total
2017-2018 Season	11334	470
2016-2017 Season	1388	360
5 Season Average (2012-2017)	559	684
% increase compared to 2016-2017 Season	717%	31%
% increase compared to 5 season average	1927%	-31%
% increase compared to last week	96%	4%

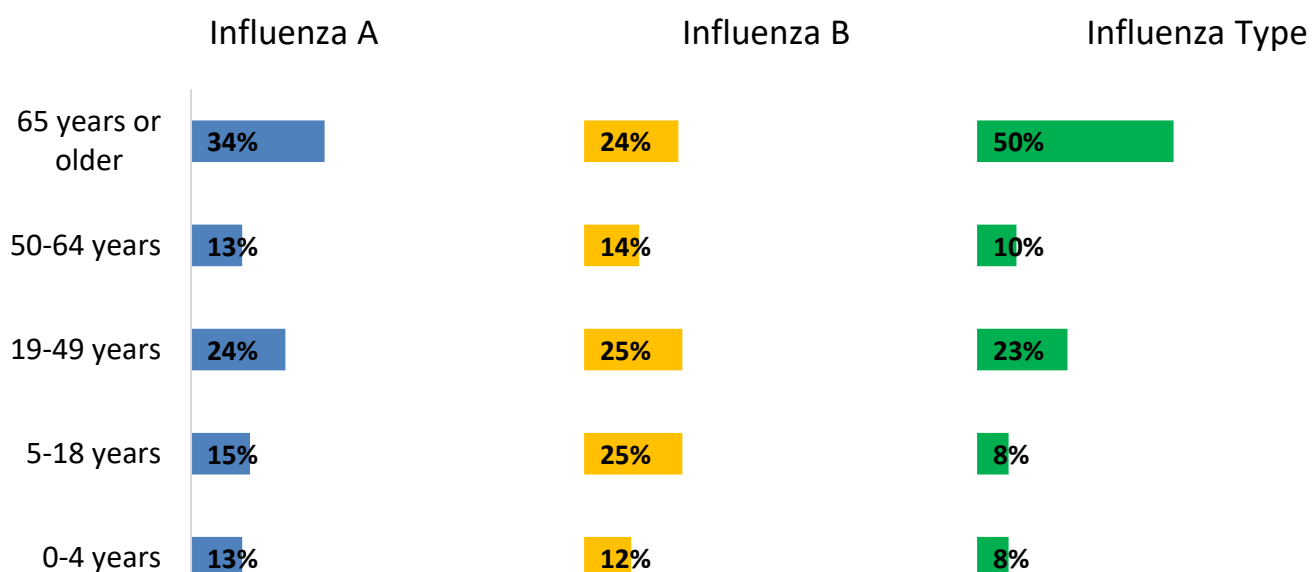


Types of Influenza in Maricopa County

Table 2. Influenza 2017-18 Season		
Types/Subtypes	Count	Percentage
Type A	10151	90%
Subtype 2009 H1N1	68	1%
Subtype H3	1589	16%
Subtyping not performed or unknown	8494	84%
Type B	1131	10%
Unknown	52	0%
Total	11334	100%



Graph 2: Confirmed influenza cases by Age-Group and Type.



* 1 Influenza A is a confirmed case with unknown age

This influenza season there have been **9279** visits to emergency departments by individuals with flu-like symptoms. To be counted as an individual with flu-like symptoms, the patient must have both fever and cough/sore throat.

The bar chart displays the weekly number of new COVID-19 cases in the Netherlands. The y-axis represents the number of cases, ranging from 0 to 1200 in increments of 200. The x-axis represents the weeks, from Week 40 to Week 38. The data shows a clear seasonal pattern with a major peak in Week 52 and a secondary peak in Week 2.

Week	Number of New Cases
Week 40	210
Week 41	270
Week 42	200
Week 43	220
Week 44	250
Week 45	240
Week 46	270
Week 47	330
Week 48	360
Week 49	410
Week 50	570
Week 51	750
Week 52	1200
Week 1	1080
Week 2	840
Week 3	610
Week 4	620
Week 5	610
Week 6	220
Week 7	0
Week 8	0
Week 9	0
Week 10	0
Week 11	0
Week 12	0
Week 13	0
Week 14	0
Week 15	0
Week 16	0
Week 17	0
Week 18	0
Week 19	0
Week 20	0
Week 21	0
Week 22	0
Week 23	0
Week 24	0
Week 25	0
Week 26	0
Week 27	0
Week 28	0
Week 29	0
Week 30	0
Week 31	0
Week 32	0
Week 33	0
Week 34	0
Week 35	0
Week 36	0
Week 37	0
Week 38	0

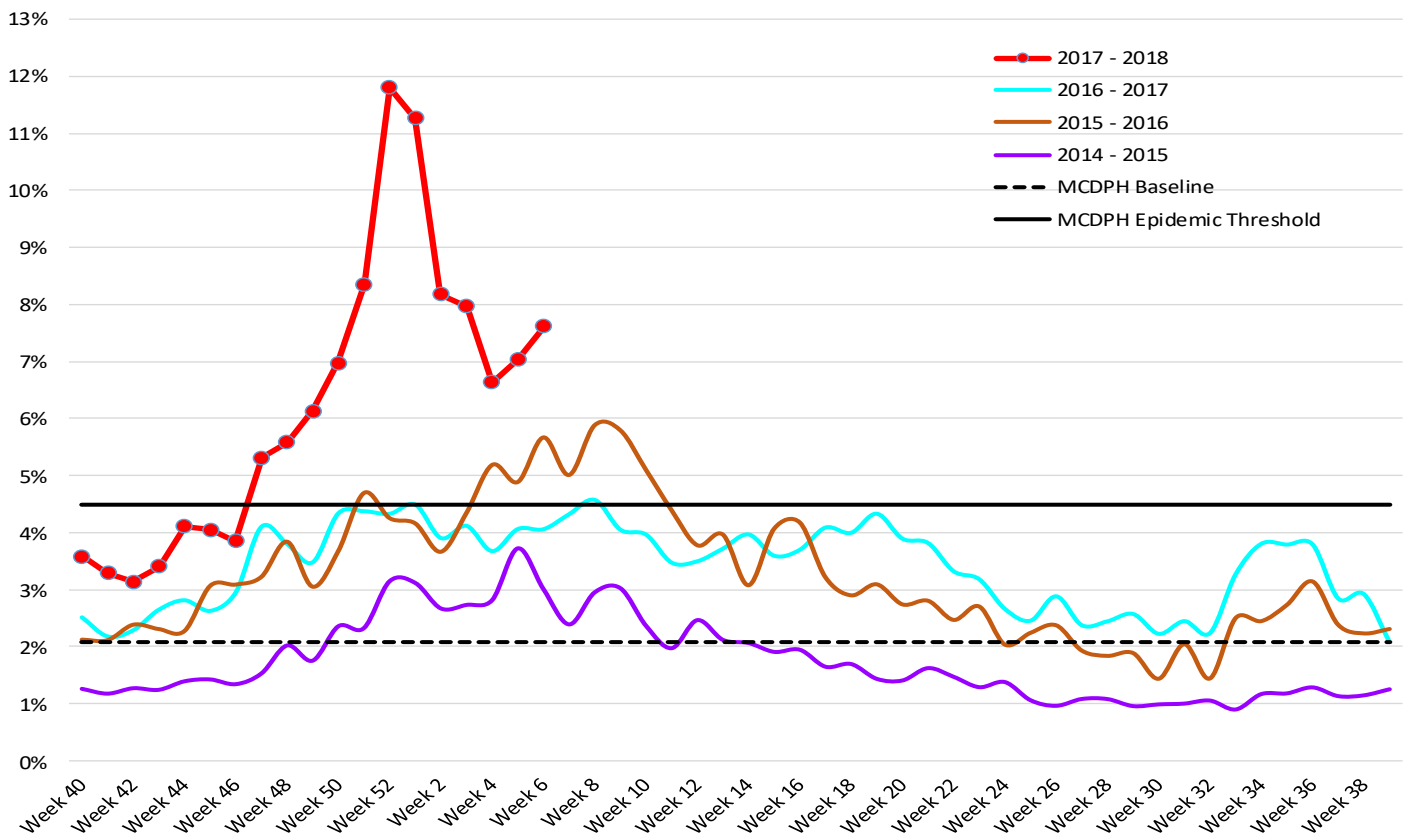
The graph displays the percentage of COVID-19 cases over time for four different seasons. The y-axis represents the percentage from 0% to 16% in 2% increments. The x-axis represents weeks from Week 40 to Week 38. A solid black line at 3% indicates the Maricopa Co. Epidemic Threshold, and a dashed black line at 2% indicates the Maricopa Co. Base Line.

- 2017-2018 Season (Red line with dots):** Starts at ~2.8% in Week 40, peaks at ~14.5% in Week 52, and then declines.
- 2016-2017 Season (Cyan line):** Starts at ~1.2% in Week 40, peaks at ~5.2% in Week 12, and then declines.
- 2015-2016 Season (Brown line):** Starts at ~2.8% in Week 40, peaks at ~10.5% in Week 8, and then declines.
- 2014-2015 Season (Purple line):** Starts at ~2.0% in Week 40, peaks at ~7.0% in Week 4, and then declines.

All seasons show a general downward trend after their respective peaks, with the 2017-2018 season showing the most significant peak above the epidemic threshold.

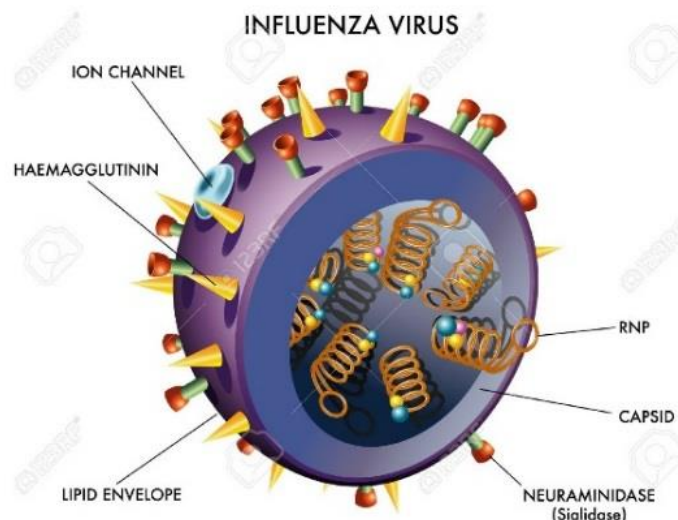
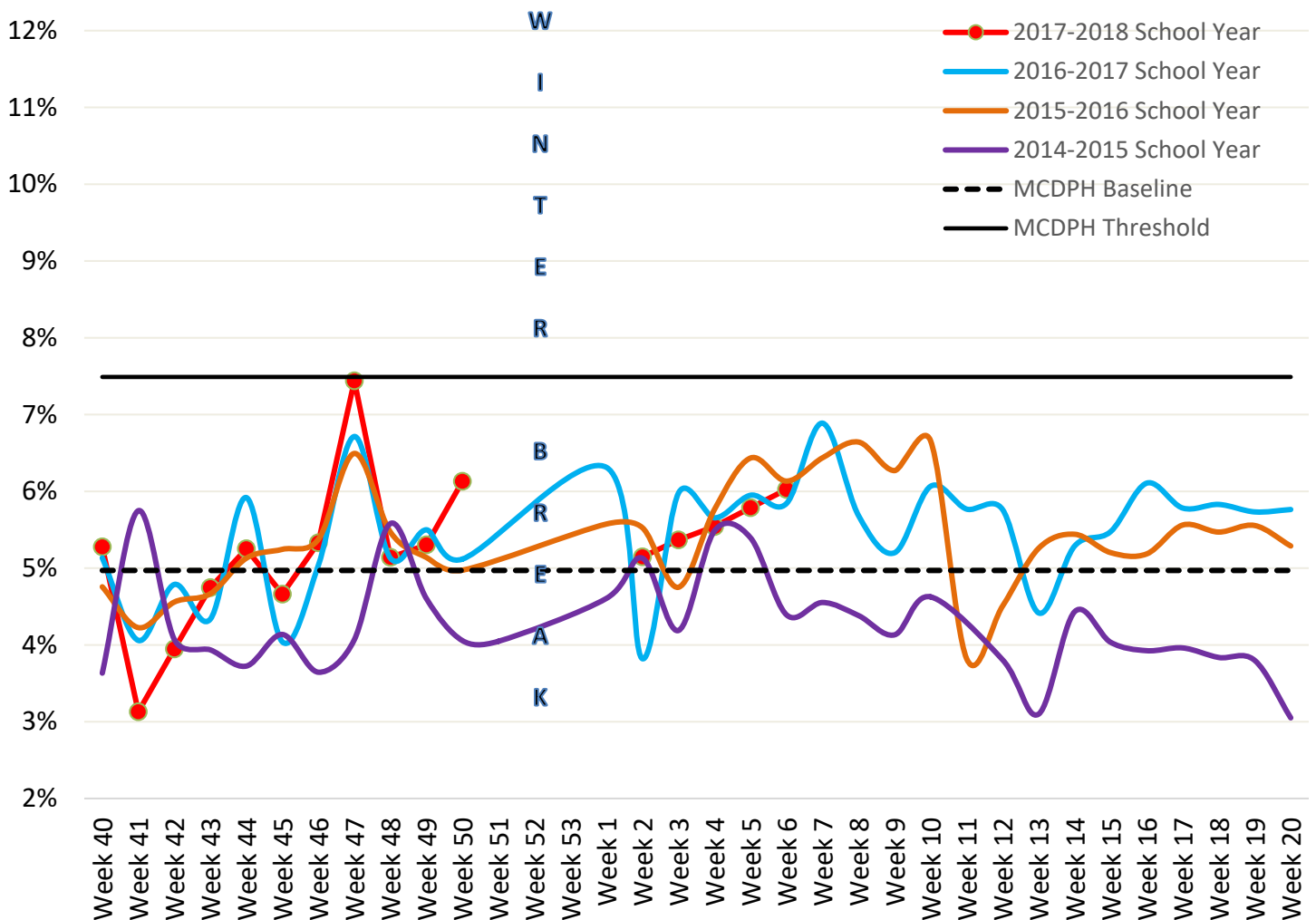
Influenza-Like Illness Activity at Sentinel Site Outpatient Facilities Reported to the Centers for Disease Control and Prevention (CDC)

Maricopa County sentinel sites (outpatient facilities) report visits due to flu-like symptoms. This week, **7.62%** of visits at outpatient facilities were due to flu-like symptoms, last week outpatient facilities reported **7.03%**.



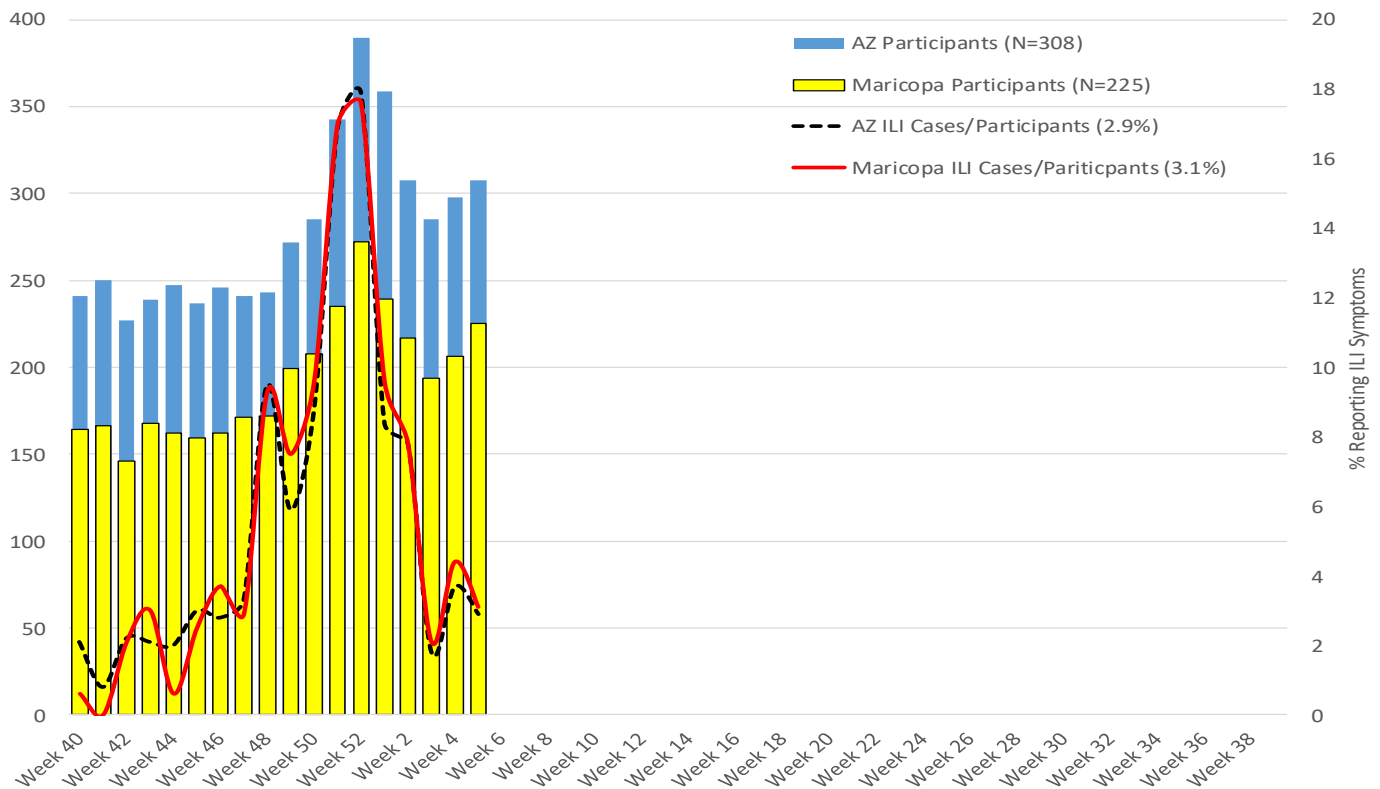
Absentee Activity at Schools

Absenteeism trends compared to the last three school years show the percent of students reported absent and illustrates the week by week trend, the current school year in **red**. (School Surveillance will begins Week 40 thru Week 20).



The following report summarizes data captured from volunteer reports to the Flu Near You participatory surveillance platform between CDC Weeks 40 and 39 (October 2017 to October 2018). This report is intended to update Maricopa County public health professionals and other partners on system performance and results during the 2017-18 influenza season. Results are NOT final and may be subject to change pending further analyses.

Count of participants and rate of ILI cases per MMWR week in Maricopa County
Flu Season: 2017-2018



Why register for Flu Near You?

Registered users have access to many features, such as:

- The ability to report their symptoms
- A map that displays where users can find vaccines in their area
- A map of flu activity in their area and across the nation
- Updated news on the current flu season, flu shots, treatment, recovery time, and more

Everyone is invited to participate in Flu Near You by enrolling at

<https://flunearyou.org>

=====

***The Maricopa County Department of Public Health wishes to thank all of the
Influenza surveillance participants:***

Arizona Department of Health Services

Local Hospital Emergency Departments & Infection Control Practitioners

Local Outpatient Facilities and Medical Directors

Maricopa County Public Schools

Maricopa County Office of Vital Statistics

Questions about this report may be directed to:

epidemiology@mail.maricopa.gov

***Information on influenza activity for the state, the U.S. and the world may be found
at the following websites:***

<http://www.azdhs.gov/phs/oids/epi/flu/index.htm> (ADHS)

<https://www.cdc.gov/flu/weekly/fluactivitysurv.htm> (CDC)

http://www.who.int/influenza/gisrs_laboratory/updates/en/index.html (WHO)